2003 Annual Water-Quality Report

This brochure is a snapshot of the quality of the water that the City of Wichita provided last year. It meets the federal Safe Drinking Water Act (SDWA) requirement for "Consumer Confidence Reports". Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It's important that customers be aware of the efforts that are made continually to improve their water system. Safe water is vital to our community. We ask that landlords, employers, and anyone else who receives the water bill for other water users share this report with them. Please read this report carefully and, if you have questions, call the numbers listed below.

City of Wichita's drinking water surpasses all federal and state drinking-water standards.

We encourage public interest and participation in our community's decisions affecting drinking water. City Council meetings occur on most Tuesdays at 9:00 AM in the City Council Chamber, at City Hall, 455 N. Main. The public is welcome to request time on the agenda for comments about water utility topics.

Consult our Web site at www.wichita.gov and, for further information, see U.S. Environmental Protection Agency (EPA) water information at www.epa.gov/safewater/

El informe contiene informacion importante sobre la calidad del aqua en su comunidad. Traduzcalo o hable con alguien que lo entienda bien.

Water Sources

The City of Wichita is supplied by a blend of surface water from Cheney Reservoir, and groundwater from a well field located in the Equus Beds Aquifer and the City. We treat your water to remove contaminants and we also add disinfectant to protect you against microbial contaminants. An assessment of our source water has been completed. For the results of the assessment, please contact us or download the results at www.kdhe.state.ks.us/nps

How to Read This Table of Water Quality Data

The table shows the results of our water-quality analyses. Unless noted otherwise, the data presented in this table is from testing done January 1 – December 31, 2003. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. Every regulated contaminant that we detected in the water, even in the minutest traces, is listed here. The table contains the name of each substance; the highest level allowed by regulation (MCL), the ideal goals for public health, the maximum amount detected (not the average), the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement. Definitions of MCL and MCLG are important.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirement that a water system must follow.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant that is allowed in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant in drinking water below which there is no known or expected risk to health.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water. The data presented in this report is from the most recent testing done in accordance with regulations.

n/a: not applicable **n/d:** not detected at testing **ppb:** parts per billion or micrograms per liter **ppm:** parts per million or milligrams per liter **pCi/l:** Pico curies per liter (a measure of radiation) **NTU:** nephelometric turbidity units

REGULATED CONTAMINANTS	COLL DATE	RESULT	RANGE	UNIT	MCL	MCLG	Vio	TYPICAL SOURCE
Arsenic	5/3	1.1	n/a	ppb	10	10	N	Erosion of natural deposits
Barium	5/3	0.04	n/a	ppm	2	2	N	Erosion of natural deposits
Fluoride	5/3	0.29	n/a	ppm	4	4	N	Erosion of natural deposits
Selenium	5/3	2.5	n/a	ppb	50	50	N	Erosion of natural deposits
Nitrate	5/3	0.88	n/a	ppm	10	10	N	Erosion of natural deposits
T. Trihalomethanes	2003	33.7	27.2-46.8	ppb	80	n/a	N	Byproduct of drinking water chlorination
Haloacetic Acids	2003	15.6	11-19.5	ppb	60	n/a	N	Byproduct of drinking water disinfection
Radionuclide-Gross Alpha	10/01	1	n/a	pCi/l	15	0	N	Erosion of natural deposits
					MRDL	**MRDLG**		
Disinfectant Residual	2003	1.9	1.84-1.97	ppm	4	4	N	Added to drinking water for disinfection
					TT			
Total Organic Carbon	2003	2.26	2.07-2.56		Removal	n/a	N	Naturally present in the environment
					ratio >1			
Turbidity	2003	0.4	n/a	NTU	**TT=5 NTU**	0	N	Soil runoff
		98	n/a	%	**TT ****			
**TT=lowest monthly percentage of samples less than or equal to 0.3 NTU								
Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration process.								

90th PERCENTILE	DATE					Sites over the AL	Vio	TYPICAL SOURCE
Lead	2003	7	n/a	ppb	AL=15	0	N	Corrosion of household plumbing system
Copper	2003	0.012	n/a	ppm	AL=1.3	0	N	Corrosion of household plumbing system

SECONDARY CONTAMINANTS	DATE	RESULT		UNIT			Vio	TYPICAL SOURCE
Calcium	5/3	29		ppm	75-200		N	Erosion of natural deposits
Magnesium	5/3	14		ppm	50-150		N	Erosion of natural deposits
Sodium	5/3	94		ppm	100		N	Erosion of natural deposits
Potassium	5/3	4.3		ppm	100		N	Erosion of natural deposits
Chloride	5/3	120		ppm	250		N	Erosion of natural deposits
Sulfate	5/3	78		ppm	250		N	Erosion of natural deposits
Total Hardness	5/3	130		ppm	400		N	Erosion of natural deposits
Alkalinity as CaCO3	5/3	84		ppm	60-300		N	Erosion of natural deposits
pH	5/3	7.3		pH units	6.5-8.5		N	Erosion of natural deposits
Specific Conductivity	5/3	690		mmho/l	1500		N	Erosion of natural deposits
Tot. Dissolved Solids	5/3	400		ppm	500		N	Erosion of natural deposits
Total Phosphorous (P)	5/3	0.047		ppm	5		N	Erosion of natural deposits
Silica	5/3	8.8		ppm	50		N	Erosion of natural deposits
Corrosivity	5/3	-0.91		LI	0-+1.0		N	Erosion of natural deposits
Iron	5/3	0.012		ppm	0.03		N	Erosion of natural deposits

Unregulated Contaminants

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicated the occasional presence of these organisms in our source water, but not in the treated water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

The U.S. Environmental Protection Agency's Unregulated Contaminant Monitoring Rule required the City of Wichita public water supply to monitor for the unregulated contaminants listed in the rule. The required monitoring has been completed and the results are available by calling 316-265-1300.

Required Additional Health Information

To ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Total Coliform Rule (TCR) – Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. During 2003, we collected 2,468 samples, which was more than the required number of 180 each month. July has a positive for fecal coliform. All follow-up samples were in compliance. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. The may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
(B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.
(D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit

the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than is the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

Search for Excellence

Our utility has joined the Partnership for Safe Water, a national initiative to help achieve operational excellence in water treatment. The partnership was developed through cooperation among the U.S. Environmental Protection Agency (EPA), states, and water supply associations to provide better protection for consumers from microbial contaminants that can cause intestinal illness.

National Primary Drinking Water Regulation Compliance

For more information, call the City of Wichita at 316-265-1300.

Water quality data for community water systems throughout the United States is available at www.waterdata.com.

Learn more about the City of Wichita services at www.wichita.gov